

it to be a female of a new species of this rare genus *Hedruris*. In size it is about four times longer than the *androphora*; it has a larger head, and the body more distinctly striated across. This species I have named *Hedruris Siredonis*; but as only the female has been as yet discovered, I am unable to give a very detailed description of it.

HEDRURIS SIREDONIS.

Female. Body 13 millimetres long, $\frac{1}{2}$ millimetre broad, strongly striated across, narrower at the anterior than the posterior extremity, this latter terminating in an obtuse point furnished with what Diesing calls a suctorial papilla, by which it adhered to the coat of the stomach of the *Siredon*. *Male* — ?

Hab. Stomach of the *Siredon mexicanus* from Mexico. British Museum Collection.

Along with this interesting species, and in the abdominal cavity of the same animal, were three specimens of another Nematoid Worm of a very different form. I consider it to belong to the family *Strongylidæ*, and to a genus which Dujardin established under the name of *Leptodera*, so called from the long narrow neck (*λεπτός*, narrow, *δέρη*, neck) which distinguishes the species upon which the genus was founded. Only one species of this genus has as yet been described,—the *Leptodera flexilis* of Dujardin, which was found parasitic in the vas deferens of one of the Common Slugs (*Limax cinereus*). This species is only from $2\frac{1}{2}$ millimetres (male) to 4 mill. (female) in length, whilst the new species from the *Siredon* measures from 16 to 25 mill.

LEPTODERA ELONGATA.

Female. 25 millimetres long. Body filiform, neck long and slender; tail terminating in a long sharp point. Vulva situated about the middle of the length of the body.

Male. 16 millimetres long. Body filiform, neck long and slender, tail sharp-pointed. Spicula double, proceeding from a swelling near the commencement of the tail, and accompanied by two short membranous expansions like wings.

Hab. Abdominal cavity of *Siredon mexicanus*. B.M. Collection.

MISCELLANEOUS.

On the Flowering of the American Aloe. By W. SOWERBY.

To the Editors of the Annals of Natural History.

GENTLEMEN, Botanic Gardens, Regent's Park, Sept. 20, 1858.

As the American Aloe (*Agave Americana*), although a very common plant, is seldom seen in flower, at least in England, perhaps a few notes on the growth, &c., of the one now in bloom in these Gardens may interest some of the readers of the 'Annals.'

The familiar fable of the "plant that only flowers once in a hundred years" has originated, no doubt, from the fact that some of the specimens that have produced flowers in England may have seen the years of a century, while many die without flowering before they attain that age; but this is quite the exception to the natural habit of the plant, which in its native country (South America) sometimes flowers at the age of eight, or even five years, the average being about ten. Loudon mentions a specimen that flowered in Devonshire at the age of twenty years, and another in Cornwall fifty-six years old: both of these were grown in the open air; and he thinks that the *Agave*, if grown under the same treatment as a Pine-apple, would no doubt flower as soon, or in about four or five years. I have known some plants of American Aloe, when well cultivated, increase more in two years than other neglected or starved individuals in ten. Not only Aloes, but many other plants, especially succulents, when exposed to cold and allowed very little nourishment, remain for years in an almost stationary position with regard to growth, although alive. The Chinese take advantage of this fact in producing their pigmy trees.

In Mexico, Spain, Sicily, and various parts of India, the *Agave* is largely cultivated, not so much as an ornament as for its valuable commercial products. 'Pulque,' the national beverage of the native Mexicans, is prepared from the sap, which flows in great abundance from the flower-stem, which is cut off for this purpose as soon as it appears, from among the leaves, the supply being about seven or eight quarts per day. The ligneous fibre called 'Pita'-thread is also very valuable, especially for ropes and cordage, and exceedingly strong. Roofs of houses are often covered with the leaves, in place of tiles or thatch. The plants set in rows make excellent and impenetrable fences; and in Jamaica the expressed juice of the leaves, when evaporated, has served as a substitute for soap.

In the year 1839, a specimen of *Agave Americana* flowered in these Gardens, being one of three plants the property of a gentleman at Highgate, who stated that they had been in the possession of his family for seventy-five years, and also that the plants were twenty or twenty-five years old when they first obtained them. In 1841 the Society purchased the two remaining plants, they being about the same size as the one that flowered: one of these threw up a flower-spike in June 1845, in a greenhouse; and now, thirteen years later, the last remaining of these old friends is finishing its long and dreary life, at the age of 115 or 120 years. It has scarcely increased in size for the last ten years, and has probably been waiting since 1848 for some slight alteration in its treatment to induce it to flower. Early in May the plant was removed from the conservatory to a sheltered nook in the open garden, and permitted to enjoy the influence of sunshine and genial showers; on the 12th of June the flower-spike first made its appearance, the average growth for a few weeks being about 3 inches in 24 hours, the daily register varying from 1 to 10 inches, according to the temperature and state of the weather; the rate of increase gradually became less till the 28th of August, when the up-

ward growth of the spike terminated, it having reached exactly 24 feet. Some time before this, the scape began to throw out its lateral branches; these extend 6 inches to 2 feet from the main stem, to the number of forty-six, and branch out from all sides in graceful curves in the form of a candelabrum, which, indeed, the whole plant much resembles; at the extremities of these laterals are seated three to seven bunches of from twelve to fifty flowers, the total number of flowers being about 3500. The first bud expanded on the 8th of September, since which a great number have rapidly opened. It is scarcely correct to make use of the term opened; for the corolla does not expand. The stamens and style being protruded from among the upper points of the petals, and having a bright yellow colour, give a somewhat gay and light appearance to the plant, the petals themselves being of a yellowish-green hue. Some few months before the scape made its appearance, the leaves began to wither; and as the flower-spike rapidly increased, in the same ratio the leaves decayed and shrivelled, the juices they contained having evidently been stored up for the express purpose of supplying the nourishment required by the flower; and only by this means could the large amount of vegetable matter contained in the flower-scape have been collected in so short a time, as the roots of the plant are very inconsiderable. The whole plant dies immediately it has perfected its flowers, so that it can only flower "once" in its lifetime, be this ten or a hundred years.

Believe me, Gentlemen,

Yours sincerely,

W. SOWERBY.

On a variety of Chorda filum. By Dr. J. E. GRAY, F.R.S. &c.

The base and apex of *Chorda filum* (Sea-traces) are usually attenuated and acute. Mrs. Gray observed, in the specimens growing in Swanage Bay, that some individual fronds of a group from the same root had the apex largely dilated into a broad, ovate, hollow club, with a few minute, compressed, transparent spines near the more or less blunt top of the club. This club, which is often 4 or 5 inches long and an inch in diameter, is formed by a dilatation of the frond; and, like the usual state of the frond, it easily divides across and separates into a spiral band, as the common form of the frond is represented as becoming unrolled in fig. 3 of pl. 107 of Dr. Harvey's 'Phycologia Britannica,' and as described and figured by Dr. Greville, 'Algæ Britannicæ,' p. 48. t. 7. f. 2.

I do not recollect having observed this variety noticed in any work on British Algæ, which is the more remarkable, as the club, bobbing up and down on the surface of the sea like an angler's float, makes a very conspicuous object in the smooth water of that beautiful bay. I find it is noticed in Lyngbye's work on the Algæ of Denmark as "*Chorda filum* β . *inflata fronde simplicissima majori apice inflata*," p. 73 (1810), found in the "Sinu Otheniensi;" and he states that it is also described as a *Ceramium* by Roth, 1797; see Cat. Bot. i. 174.